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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,484	08/20/2003	Trung V. Le	10383US01	7391

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Attention: Eric D. Levinson
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Legal Affairs
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EXAMINER	
GETACHEW, ABIY	
ART UNIT	PAPER NUMBER
2841	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/644,484	LE, TRUNG V.	
	Examiner	Art Unit	
	ABIY GETACHEW	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,7-9,11-13,15,19,20,23,25 and 27-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,7-9,11-13,15,19,20,23,25 and 27-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 7-9, 11-13, 15, 19-20, 23, 25, 27-30 rejected under 35 U.S.C. 103 (a) as being unpatentable over Kaneko Yoshio (2002JP-2002-084930 or US2003/0221066) in view of Liu (6,695,637 B1)

Regarding claim 1, Kaneko Yoshio discloses, a memory card (See figure 3) comprising: a memory (28, 32); a first connector (25) electrically couple to the memory (28) and conforming to a first connector (25) standard; a second connector (27) electrically coupled to the memory (32) and conforming to a second connector (26), wherein the first connector (25) standard comprises a host computer connector (HCC) standard and the second connector (27) standard comprises a device communication connector (DCC) standard; and a controller (29, 35) that controls the memory (28, 32) and controls output via the first connector (25) and the second connector (27), wherein the first (25) and second (27) connectors are electrically coupled to the memory (28, 32) through the controller (29, 35) and wherein the controller (29, 35) comprises a memory controller (30, 34) integrated with a first connector controller (not show) conforming to

the first connector (25) standard and integrated with a second connector controller (not show) conforming to the second connector (27) standard,

Kaneko Yoshio does not expressly disclose a retractable connector that can be positioned in an extended position and a retracted position.

Liu discloses a retractable connector that can be positioned in an extended position and a retracted position. (See figure 3) [Column 5, paragraph 3 lines 34-43]

Kaneko Yoshio and Liu are analogues art because they are from the same field of endeavor to device connector mating with an electrical bay connector in a computer.

At the time of the invention it would have been obvious to a person of ordinary skill in the art, to make a memory card of Kaneko Yoshio such that contains connector as taught by Liu.

The suggestion or motivation for doing so would have been obvious in view of the teaching of Liu to have an electrical connector extending from the rear of the drive which engages a mating electrical connector located at the rear of the bay.

Regarding claims 7 and 25, Kaneko Yoshio discloses, the memory card (See figures 2-4) wherein, the HCC comprises a standard selected from a group consisting of: a personal computer memory card international association (PCMCIA) standard (see column 3, paragraph 0029 and column 6, paragraph 0066), a PC Card standard, a Card Bus standard (see column 3, paragraph 0029 and column 6, paragraph 0066), a Universal Serial Bus (USB) standard (see column 3, paragraph 0029 and column 6, paragraph 0066), a Universal Serial Bus 2 (USB2) standard (see column 3, paragraph 0029 and column 6, paragraph 0066), an IEEE 1394 Fire Wire standard (see column 3,

paragraph 0029 and column 6, paragraph 0066), a Small Computer System Interface (SCSI) standard (see column 3, paragraph 0029 and column 6, paragraph 0066), an Advance Technology Attachment (ATA) standard (see column 3, paragraph 0029 and column 6, paragraph 0066), a serial ATA standard (see column 3, paragraph 0029 and column 6, paragraph 0066), a Peripheral Component Interconnect (PCI) standard (see column 3, paragraph 0029 and column 6, paragraph 0066), and a conventional serial or parallel standard (see column 3, paragraph 0029 and column 6, paragraph 0066); and the DCC comprises a standard selected from a group consisting of: a Compact Flash standard, a Smart Media standard (see column 3, paragraph 0029 and column 6, paragraph 0066), a Multimedia Card standard (see column 3, paragraph 0029 and column 6, paragraph 0066), a Secure Digital standard (see column 3, paragraph 0029 and column 6, paragraph 0066), a Memory Stick Standard (see column 3, paragraph 0029 and column 6, paragraph 0066), and an xD standard (see column 3, paragraph 0029 and column 6, paragraph 0066).

Regarding claim 8, Kaneko Yoshio discloses the memory card (See figures 2-4) wherein the first connector (explain in claim 1) is disposed (see figure 2) on a different side of the memory card (explained in claim 1) than the second connector (explain in claim 1).

Regarding claim 9, Kaneko Yoshio discloses the memory card (See figures 2-4) wherein the first connector (explain in claim 1) is disposed (see figure 2) on an opposite side of the memory card (explain in claim 1) relative to the second connector (explain in claim 1).

Regard claim 11, Kaneko Yoshio discloses the memory card (See figures 3) further comprising: a housing defining a slot for the retractable connector; and a first electrical contact on the retractable connector and a second electrical contact within the slot, wherein the first electrical contact couples to the second electrical contact when the retractable connector is extended from the slot (elements 25, 27 are within the connector 36).

Regarding claim 12, Kaneko Yoshio discloses the memory card (See figure3) wherein the first connector (explain in claim 1) is disposed on the same side of the memory card (25 is on the same side with 28) as the second connector (explain above).

Regarding claim 13, Kaneko Yoshio discloses, the memory card (See figure 3) wherein a set of electrical contact elements of the first connector (explain above) comprise a subset of a set of electrical contact elements (rectangular portion of 25 and 27) of the second connector (explain in claim 1).

Regarding claim 15, Kaneko Yoshio discloses, a memory (28, 32); a first connector (25) electrically coupled to the memory (28, 32) and conforming to a first connector (25) standard; a second connector (27) electrically couple to the memory (32) and conforming to a second connector (27) standard wherein the first connector (25) standard comprises a host computer connector (HCC) standard and the second connector (27) standard comprises a device communication connector (DCC) standard; a first controller (29) electrically coupled to the memory (28) and the first connector (25), the first controller (29) controlling the memory (28) and output via the first connector (25); wherein the first controller (29) comprises a memory controller (30) integrated with

a first connector controller (not show) conforming to the first connector (25) standard; and a second controller (35) electrically coupled to the second connector (27) and the first controller (29), the second controller (35) controlling output via the second connector (27) and conforming to the second connector (27) standard, therein the first .connector (25) is electrically coupled to the memory (28) through the first controller (29), and the second connector (27) is electrically coupled to the memory (32) through the second controller (35) and the first controller (29), wherein at least one of the first and the second connector (27).

Kaneko Yoshio does not expressly disclose a retractable connector that can be positioned in an extended position and a retracted position.

Liu discloses a retractable connector that can be positioned in an extended position and a retracted position. (See figure 3) [Column 5, paragraph 3 lines 34-43]

Kaneko Yoshio and Liu are analogues art because they are from the same field of endeavor to device connector mating with an electrical bay connector in a computer.

At the time of the invention it would have been obvious to a person of ordinary skill in the art, to make a memory card of Kaneko Yoshio such that contains connector as taught by Liu.

The suggestion or motivation for doing so would have been obvious in view of the teaching of Liu to have an electrical connector extending from the rear of the drive which engages a mating electrical connector located at the rear of the bay.

Regard claim 19 Kaneko Yoshio discloses the memory card further comprising a third connector (24) electrically coupled to the memory (28) and conforming to a third

connector (24) standard.

Regard claim 20, Kaneko Yoshio discloses the memory card further comprising a fourth connector (26) electrically coupled to the memory (32) and conforming to a fourth connector (26) standard.

Regarding claim 23, Kaneko Yoshio discloses, a system (See figure 3) comprising: a first device (21) including a first electrical contact (rectangular portion of 25) for receiving a connector that conform to a first connector (25) standard a second device (22) including a second electrical contact (rectangular portion of 27) for receiving a connector that conforms to a second connector (27).standard; and a memory card (all elements of figure 3) including: a memory (28, 32), a first connector (25) conforming to the first connector (25) standard such that the first connector (25) can be received by the first electrical contact (rectangular portion of 25) of the first device (21), a second connector (26) conforming to the second connector (26) standard such that the second connector (27) can be received by the second electrical contact (rectangular portion of 27) of the second device (22), wherein the first connector (25) stand comprises a host. Computer connector (HCC) standard and the second connector (27) standard comprises a device communication connector (DCC) standard, and a controller (29) that controls the memory and controls output via the first connector (25) and the second connector (27) wherein the first (25) and second (27) connectors are electrically coupled to the memory through the controller (29, 35) and wherein the controller (29, 35) comprises a memory controller (30, 34) integrated with a first connector controller (connector not show)conforming to the first connector (25) standard

and integrated with a second connector controller (connector not show) conforming to the second connector (27) standard.

Kaneko Yoshio does not expressly disclose a retractable connector that can be positioned in an extended position and a retracted position.

Liu discloses a retractable connector that can be positioned in an extended position and a retracted position. (See figure 3) [Column 5, paragraph 3 lines 34-43]

Kaneko Yoshio and Liu are analogues art because they are from the same field of endeavor to device connector mating with an electrical bay connector in a computer.

At the time of the invention it would have been obvious to a person of ordinary skill in the art, to make a memory card of Kaneko Yoshio such that contains connector as taught by Liu.

The suggestion or motivation for doing so would have been obvious in view of the teaching of Liu to have an electrical connector extending from the rear of the drive which engages a mating electrical connector located at the rear of the bay.

Regarding claim 27 Kaneko Yoshio discloses, a system (See figure 3) comprising: a first device (21) including a first electrical contact (rectangular portion of 25) for receiving a connector that conforms to a first connector (25) standard;
a second device (22) including a second electrical contact (rectangular portion of 27) for receiving a connector that conforms to a second connector (27) standard; and a memory card (21, 22) including: a memory (28, 32), a first connector (25) conforming to the first connector (25) standard such that the first connector (25) can be received by the first electrical contact (rectangular portion of 25) of the first device (21), a second

connector (27) conforming to the second connector (27) standard such that the second connector (27) can be received by the second electrical contact (rectangular portion of 27) of the second device (22), wherein the first connector (25) standard comprises a host computer connector (HCC) standard and the second connector (27) standard comprises a device communication connector (DCC) standard, a first controller (29) electrically coupled to the memory (28) and the first connector (25), the first controller (29) controlling the memory (28) and output via the first connector (25), wherein the first controller (28) comprises a memory controller (30) integrated with a first connector controller (not show) conforming to the first connector (25) standard, and a second controller (35) electrically coupled to the second connector (27) and the first controller (35), the second controller (35) controlling output via the second connector (27) and conforming to the second connector (27) standard, wherein the first connector (25) is electrically couple to the memory (28) through the first controller (29), and the second connector (27) is electrically couple to the memory (32) through second controller (35) and the first controller (29) .

Kaneko Yoshio does not expressly disclose a retractable connector that can be positioned in an extended position and a retracted position.

Liu discloses a retractable connector that can be positioned in an extended position and a retracted position. (See figure 3) [Column 5, paragraph 3 lines 34-43]

Kaneko Yoshio and Liu are analogues art because they are from the same field of endeavor to device connector mating with an electrical bay connector in a computer.

At the time of the invention it would have been obvious to a person of ordinary skill in the art, to make a memory card of Kaneko Yoshio such that contains connector as taught by Liu.

The suggestion or motivation for doing so would have been obvious in view of the teaching of Liu to have an electrical connector extending from the rear of the drive which engages a mating electrical connector located at the rear of the bay.

Regarding claim 28 Kaneko Yoshio discloses, a memory card (See figure 3) comprising: a memory (28, 32); a first connector (25) electrically couple to the memory (28) and conforming to a first connector (25) standard; a second connector (27) electrically coupled to the memory (32) and conforming to a second connector (26), wherein the first connector (25) standard comprises a host computer connector (HCC) standard and the second connector (27) standard comprises a device communication connector (DCC) standard; one or more controllers that control the memory (28,32) and control output via the first connector and the second connector (25,27), wherein the first and second connectors (25,27) are formed along a common side of the memory card (explained in claim 1) and wherein electrical contacts of the second connector (27) comprise a subset of electrical contacts of the first connector(25).

Regarding claim 29, Kaneko Yoshio discloses, wherein the second connector (27) comprises a retractable connector (23) that can be positioned in an extended position and a retracted position. (See figure 3).

Regarding claim 30, Kaneko Yoshio discloses, wherein the electrical contacts of the second connector (27) comprise movable contacts form the second connector (27)

when the second connector is in the extended position and wherein the electrical contacts of the second connector (27) comprise a subset of the electrical contacts of the first connector when the second connector is in the retracted position (23). (See figure 3).

4. ***Pertinent Art***

Harari et al. (2004/0089717 A1) the invention relates to the structure of removable electronic circuit cards having different mechanical and/or electrical interfaces, particularly those including mass non-volatile integrated circuit memory, Kao (US 2004/0033727 A1) this invention relates to a plug, which can be connected to a receptacle of universal series Bus (USB) receptacle or a USB plug.

Response to Arguments

5. Applicant's arguments with respect to claim1, 7-9, 11-13, 15, 19-20, 23, 25, 27-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABIY GETACHEW whose telephone number is (571)272-6932. The examiner can normally be reached on Monday to Friday 8Am to 4:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DEAN REICHARD can be reached on (571)272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dean A. Reichard/
Supervisory Patent Examiner, Art Unit 2841

Abiy Getachew
Examiner
Art Unit 2841

A.G.
May 5, 2008